

ABSTRACT

Air conditioning chiller operating efficiency is evaluated in response to chiller operating parameters input to a computing device which calculates separately the efficiencies of the condenser and evaporator components of the chiller. Additional efficiency calculations are performed to identify specific causes of inefficiency in the condenser and evaporator. The computing device also adjusts the efficiency calculations as appropriate to account for actual compressor current load conditions. The device determines whether chiller efficiency is being compromised by poor performance of one or more chiller components, calculates inefficiency values, estimates the cost of the inefficiency, identifies specific causes of the inefficiency, and suggests appropriate remedial actions to restore maximum efficiency of the chiller.

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